

ABSTRACT

An object is to provide an image generation system and program which can realize a realistic, variable and natural representation of motion with less data. When the forearm (14) of an enemy character is hit, the forearm (14) is moved through a physical simulation by a vector of hitting force FH0. At the same time, vectors of hitting force FH1 to FH4 are sequentially transmitted to the brachium (16), chest (18) and hip (20) which are parent parts for the forearm (14) while their magnitude being sequentially attenuated. These vectors of hitting force FH1 to FH4 move these parent parts to generate a motion of the object. A rotational resistance force depending on its angular velocity and a restoring force for returning the part to its default posture act on each of the parts. When the object is hit, the play of motion based on motion data is switched to the generation of motion through the physical simulation. When a given time period elapses or when the strength parameter relating to the object becomes equal to zero, the generation of motion is switched to the play of motion. On switching, a connecting motion is played or generated.